

ABSTRACT

An optical amplifier includes an optical amplification medium, an excitation source to stimulate the amplification medium to output at least one wavelength gain peak, and a gain equalizer to equalize the output of the amplification medium such that gain is produced at wavelengths
5 other than the wavelength gain peak. The gain equalizer may attenuate gain at the peak wavelength. The gain equalizer may equalize the output of the amplification medium such that gain is produced at wavelengths less than the wavelength gain peak. The optical amplifier may include both a gain equalizer and automatic level control circuitry to respectively maintain substantially uniform gain at wavelengths within an optical signal band and maintain constant
10 output power.
